IN THE CLAIMS:

Please substitute the following claims for the same-numbered claims in the application:

1.   (Currently Amended) A computer-implemented method for determining a supply chain plan comprising:

        receiving, by a computer, a single demand record for a demand, said single demand record having multiple different demand dates;

        creating, by said computer, from a single demand record for a demand, a plurality of distinct demand records for said demand, wherein each of said distinct demand records for said demand has only a single one of said different demand dates;

        performing, by said computer, core processing to create said supply chain plan, wherein said core processing separately and simultaneously considers [[all]] each one of said distinct demand records for said demand when creating said supply chain plan, attempting to satisfy, at a same time, each of said multiple different demand dates; and

        outputting a report based on results of said core processing.

2.   (Original) The method in claim 1, further comprising performing postprocessing on said supply chain plan to select one of said distinct demand records for supplying said single demand record.

3.   (Original) The method of claim 1, wherein said distinct demand records have different

demand priorities.

4.   (Original) The method of claim 3, further comprising performing a binning operation to represent said distinct demand records with demand priorities.

5.   (Original) The method of claim 1, further comprising selecting one of said distinct demand records for supplying said single demand record, based at least in part upon pricing.

6.   (Original) The method of claim 1, wherein said different demand dates comprise a commit date and a request date.

7-20.   (Cancelled).

21.   (Currently Amended) A computer-implemented method for determining a supply chain plan comprising:

        receiving, by a computer, a single demand record for a demand, said single demand record having multiple different demand dates;

        creating, by said computer, from a single demand record for a demand, a plurality of distinct demand records for said demand, wherein each of said distinct demand records for said demand has only a single one of said different demand dates;

        performing, by said computer, core processing to create said supply chain plan, wherein said core processing separately and simultaneously considers [[all]] each one of said distinct

demand records for said demand when creating said supply chain plan, attempting to satisfy, at a

same time, each of said multiple different demand dates; and

after said performing of said core processing, selecting one of said distinct demand

records for supplying said single demand record, wherein said selecting process is based at least

in part upon pricing; and

outputting a report based on results of said core processing and said selecting.

22.   (Original) The method in claim 21, wherein said selecting process provides different

prices for different demand dates.

23.   (Original) The method of claim 21, wherein said distinct demand records have different

demand priorities.

24.   (Original) The method of claim 23, further comprising performing a binning operation to

represent said distinct demand records with demand priorities.

25.   (Original) The method of claim 21, wherein said core processing is based on iterative

solutions of a linear program.

26.   (Original) The method of claim 21, wherein said different demand dates comprise a

commit date and a request date.

27-33. (Cancelled).

34.   (Previously Presented) The method of claim 1, wherein said core processing comprises linear programming.

35.   (Previously Presented) The method of claim 21, wherein said core processing comprises linear programming.

36.   (New) The method of claim 1,

said multiple different demand dates comprising a first demand date and a second demand date,

said demand being for a product having a given part number, and

said creating of said plurality of distinct demand records for said demand comprising:

> creating a first new part number for satisfying said first demand date and a second new part number for satisfying said second demand date;
>
> assigning said single demand to said first new part number with a first priority and to said second new part number with a second priority that is higher than said first priority; and
>
> creating distinct binning records for said first new part number and said second new part number so that said given part number bins to both said first new part number and said second new part number.

37.   (New) The method of claim 36, further comprising setting penalties for said first new part number and said second new part number, said penalties comprise at least:

a first backorder penalty for said first new part number and a second backorder penalty for said second new part number, wherein said first backorder penalty is relatively low compared to said second backorder penalty and wherein said first backorder penalty and said second backorder penalty combine is equal to an original backorder penalty for said single demand; and

a first inventory cost for said first new part number and a second inventory cost for said second new part number, wherein said first new inventory cost is set to be at least as high as an original inventory cost for said single demand and said second new inventory cost is set at zero.

38.   (New) The method of claim 36, prior to said outputting, re-instituting said given part number.

39.   (New) The method of claim 1, said computer being programmed to implement said method.

40.   (New) The method of claim 21,

said multiple different demand dates comprising a first demand date and a second demand date, said demand being for a product having a given part number, and

said creating of said plurality of distinct demand records for said demand comprising:

creating a first new part number for satisfying said first demand date and a second new part number for satisfying said second demand date;

assigning said single demand to said first new part number with a first priority and to said

second new part number with a second priority that is higher than said first priority; and

creating distinct binning records for said first new part number and said second new part

number so that said given part number bins to both said first new part number and said

second new part number.

41.   (New) The method of claim 40, further comprising setting penalties for said first new part

number and said second new part number, said penalties comprise at least:

a first backorder penalty for said first new part number and a second backorder penalty

for said second new part number, wherein said first backorder penalty is relatively low

compared to said second backorder penalty and wherein said first backorder penalty and said

second backorder penalty combine is equal to an original backorder penalty for said single

demand; and

a first inventory cost for said first new part number and a second inventory cost for said

second new part number, wherein said first new inventory cost is set to be at least as high as

an original inventory cost for said single demand and said second new inventory cost is set

at zero.

42.   (New) The method of claim 40, prior to said outputting, re-instituting said given part

number.

43.   (New) The method of claim 21, said computer being programmed to implement said

method.